SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

GHS PRODUCT IDENTIFIER

AQT 830

OTHER MEANS OF IDENTIFICATION

CAS:	Mixture not listed in registry
EC:	Mixture not listed in registry
GESTIS DATABASE:	Mixture not listed in registry
RTECS:	Mixture not listed in registry
ICSC:	Mixture not listed in registry
GESTIS DATABASE:	Mixture not listed in registry
CHEMICAL FAMILY:	Mixture not determined
SYNONYMS:	None
PROPER SHIPPING NAME:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
CHEMICAL FORMULA:	Mixture not determined
PRODUCT STOCK CODE/S:	INT830(1000Kg); AQT830A(25Kg); AQT830B(200Kg); AQT830C(1000Kg)
SDS LINK:	http://aquatradesa.ddns.net/owncloud/index.php/s/Tjz4SQM2IavJIyx

RECOMMENDED USE	RESTRICTIONS ON USE
AQT 830 is a cost-effective liquid coagulant/flocculant blend suitable for use in most applications, including potable water production. **AQT 830** is ideally suited for application as: • Municipal drinking water production • Industrial applications where coagulants are needed with flocculants.	Not for end user consumption. Not for food, drug, medical or household use.

SUPPLIER'S DETAILS

AQUATRADE WATER TREATMENT CHEMICALS (PTY) LTD

22 Grader Rd, Spartan
Gauteng, South Africa

PO Box 357
Isando, 1600

Tel: +27 11 394 0752
info@aquatradesa.co.za
www.aquatradesa.co.za

SDS Enquiries only

SDS ENQUIRIES ONLY		
NAME	**TEL**	**HOURS AVAILABLE**
R. van Rooyen	+27 76 590 9559	SAST 08:00 – 16:00 Mon. – Fri.

EMERGENCY PHONE NUMBER		
NAME	**TEL**	**HOURS AVAILABLE**
SPECIALIST		
S. Biondi	+27 68 237 2033	Mon. – Fri. 05:00 –20:00 GMT
H. van Niekerk	+27 82 410 5540	Mon. – Fri. 05:00 –20:00 GMT
Spilltech	+27 86 100 0366	24/7
OPERATOR		
SHEQ Coordinator	+27 76 590 9559 +27 87 654 3326	24/7 Mon. – Fri. 06:00 –18:00 GMT

SECTION 2 — HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Corrosive to Metals (Category 1), H290

Serious Eye Damage/Eye Irritation (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS LABEL ELEMENTS

GHS HAZARD CODES

May be corrosive to metals.

Causes serious eye damage.

GHS PRECAUTIONARY CODES

Keep only in original packaging.

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a doctor/first aider.

Absorb spillage to prevent material damage.

Store in a corrosion resistant/glass/HDPE container with a resistant inner liner.

Hazard Phrase

Danger

PICTOGRAMS

OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS	EC	MIN %	MAX %	HAZARD NOTES
Coagulant	CBI		30	40	H290: May be corrosive to metals. H318: Causes serious eye damage.
Flocculant	CBI		5	10	H315: Causes skin irritation. H319: Causes serious eye irritation. H412: Harmful to aquatic life with long lasting effects.

CBI *– Information available to competent authority and or emergency responders.*

SECTION 4 — FIRST-AID MEASURES

DESCRIPTION OF NECESSARY FIRST AID MEASURES

Call 112 or 10177 or your local emergency help number, for emergency assistance. Provide them with information such as the compound taken, quantity and time of ingestion, age, weight, and general health status of affected individual. Carefully remove the individual from the exposure area.

IF INHALED	Move to fresh air. Give artificial respiration if breathing has stopped. If symptoms persist, call a physician.
IF IN CONTACT WITH EYES	If eye exposure has occurred, IMMEDIATELY flush eyes with water and continue washing for at least 15 minutes. DO NOT remove contact lenses, if worn. Obtain medical attention without delay, preferably from an ophthalmologist.

IF IN CONTACT WITH SKIN	IMMEDIATELY get under a safety shower. Remove contaminated clothing. Wash off with soap and water. Wash contaminated clothing before reuse. Do not take clothing home to be laundered.
IF INGESTED	Unless instructed by a healthcare professional, DO NOT induce vomiting in the affected individual. Following an ingestion of the substance, immediately drink a glass or two of water. IMMEDIATELY see a physician. In case of symptoms that indicate difficulty in swallowing including vomiting or decreased alertness, DO NOT give anything by way of mouth. Take individual to emergency room (ER) for further treatment. Always try to take the compound bottle/container to the ER.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE and DELAYED

IF INHALED	Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.
IF IN CONTACT WITH EYES	
IF IN CONTACT WITH SKIN	
IF INGESTED	

INDICATION OF IMMEDIATE MEDICAL ATTENTION & SPECIAL TREATMENT NEEDED, IF NECESSARY

Notes to physician: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy. Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the use of demulcents.

Note: Consideration should be given to the possibility that over-exposure to materials other than this product may have occurred.

SECTION 5 — FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Water spray jet, Alcohol-resistant foam, Carbon dioxide (CO2), Dry powder.
EXTINGUISHING MEDIA NOT SUITABLE	None identified.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	Hydrogen chloride and oxides of Carbon may be released when heating above the decomposition temperature.
SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS incl. PPE	**Fire Fighting Procedures**: Product is a water solution and non-flammable. In a fire, this product may build up pressure and rupture a sealed container, cool exposed containers with water spray. Use self-contained breathing apparatus in confined areas; avoid breathing mist or spray. Minimize exposure. Contain run-off. Collect contaminated firefighting water separately. Avoid runoff to enter drains. **Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PPE & EMERGENCY PROCEDURES	**COMMUNICATION**: Communicate the hazard immediately regardless of the severity. Other staff working in the area and those in supervisory roles need to be notified. If warranted, evacuate the area, and follow emergency procedures. In the case of this, communicate what spilt and how much of it to the dispatcher. This is so that appropriate action can be taken by first responders quickly after their arrival on site. **CONTROL**: Once the spill has been communicated to the appropriate parties, control it. Take measures to stop or reduce the impact of the spill. This involves closing valves and putting a tipped over container the right way up, for example. Depending on the chemical nature and severity of the spill, this step may need PPE. For example, respiratory protection. If required, shut down heat sources or any possible sources of ignition. To diffuse fumes, increase ventilation to the area of concern. Unless the fumes are a hazard themselves, in which case isolate the area. This can be done by shutting vents, windows, and doors (after evacuation). **CONTAIN**: By now the immediate situation would have been taken care of. So, now it's time to contain the spill. This step involves ensuring the spill doesn't contaminate neighbouring areas. Prevent the spill from spreading to drains or flowing into environmentally sensitive areas. Depending on what spilt, you can contain it by using absorbent mats or neutralisers. Spread them around the boundary of the spill and then work them into the centre of it. Some situations will need a dike to be built or a spill sock to be used in the blocking or directing of the spillage. If during the process you need to leave the area of concern, block access to the spillage. Do this with caution tape or some other barrier so that other people in the workplace don't come into contact with it. **CLEAN-UP**: The final step in the 4-part spill response process is the clean-up. Dispose of any absorbent mats and other neutralising materials. Rubbish bags or pails/drums can be used for this, depending on the size of the spill. Sometimes the nature of the spill will mean that any brooms, brushes, pans, or other equipment used to clean-up to be disposed of too. If it is a hazardous material that is being disposed of, do so in line with the local environmental law and regulation. This includes labelling before disposal. Wash any affected surfaces with the correct solution for the spill at hand. This could be, for example, detergent, water, or bleach. Hands, clothes, and any other areas that have been in contact with the spilled material may also need decontamination.
ENVIRONMENTAL PRECAUTIONS	Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Report spills in excess of the NEMA reporting quantity to the Department of Environment, Forestry and Fisheries Tel: +27 86 111 2468 or E-mail: callcentre@environment.gov.za.
METHODS & MATERIALS FOR CONTAIMENT & CLEANING UP	**Occupational spill**: Do not touch-spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.

	For spills: Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. Label containers with its content and dispose it in accordance with local regulations. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind. Open burning or dumping of this material is prohibited. Do not get water inside containers.

SECTION 7 — HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Avoid contact with eyes and skin, and inhalation of spray and vapour. Use with adequate ventilation. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high-water mark. Water used to clean equipment must be disposed of correctly to avoid contamination. **Hygiene measures:** Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put-on clean clothing.
CONDITIONS FOR SAFE STORAGE	**Storage area:** Store in a cool, dry area. Keep container in a well-ventilated place. Keep locked up. Unauthorized persons are not admitted. Meet the legal requirements. **Storage conditions:** Storage temperature 10-27°C. **Collocated storage: P**rohibited – Pharmaceuticals, foods, and animal feeds including additives. **Organisational Measures:** Do not use any food containers - risk of mistake. Containers must be labelled clearly and permanently. Store in the original container as much as possible. Provide instruction on the hazards and the protective measures using an instruction manual is required with signature if just more than one minor hazard was detected. Instruction must be provided before employment and then at a minimum of once per annum thereafter. **Segregation and or Separation requirements:**

Compatible	Dangerous goods of the same Class should be compatible; consult SDS or suppliers about requirements for individual substances.	Class 8
Keep Apart	Dangerous goods of these Classes should be kept apart by at least 3m. Consult the SDS or supplier.	Class 2.1, 2.2, 2.3, 3, 4.1, 4.2, and 4.3.
Segregate From	These combinations of dangerous goods should segregate by at least 5 m and kept in separate compounds or building compartments.	Class 1, 5.1, 6.1, 6.2 and 7
Segregation may be Necessary	Segregation of these Classes may be necessary. Consult the SDS or supplier.	N/A
Isolate	This requirement applies to organic peroxides, for which dedicated stores or storage cabinets are recommended.	Class 5.2

	Adequate separation from other buildings and boundaries is required.	
Dangerous goods of the same class could be incompatible or react dangerously; Consult SDS or suppliers about requirements for individual substances.		Class 8

NOTES:
1. In all cases, the SDS or supplier of the goods should **ALWAYS** be consulted.
2. Non-dangerous goods may be kept in segregation spaces, if they will not react dangerously with any of the dangerous goods being kept.
3. Non-dangerous goods that are combustible (excluding combustible liquids) may be kept in such spaces, provided that.
   a) hazard assessment, including an assessment of the additional fire load, has been carried out; and
   b) any necessary additional fire protection is provided.

The volume of any non-dangerous goods kept in the segregation spaces needs to be considered when calculating the volume of the spillage containment for the store.

UN Packaging Codes			
Stock Code	**Pack Size**	**Make & Category**	**UN Code**
AQT830A	25 Kg	Jerrican Plastics Non-Removable Head	UN3H1/Y
AQT830B	200 Kg	Drum Plastics Non-Removable Head	UN1H1/Y
AQT830C	1 000 Kg	Composite IBC Plastic Receptacle Steel Cage	UN31HA1/Y

Shelf Life: 6 Months.

INCOMPATIBILTIES

Conditions to avoid: Heat, Direct Sunlight.

Substances to avoid: Strong Oxidizing agents. Strong bases.

Material to avoid: Non-acid-proof metals (such as aluminium, copper and iron). Bases, Unalloyed steel, Galvanized surfaces.

SANS 10263-0 WAREHOUSING

8.4.3.2 Where flammable or **corrosive** substances are stored, the floor shall slope away from the storage area (primary collection area) to a secondary catch basin or sump of capacity at least 10 % of the total available storage volume of the fire section concerned. The secondary catch basin shall be within the fire section and shall be such that it can be well ventilated. Care shall be taken in the design of such areas to prevent contamination of the soil or ground water.

9.7.2 Every type of storage area inside a warehouse shall be clearly demarcated, for example separate storage areas for poisons, flammables and **corrosives** shall display the relevant hazard class diamond (see table 1). The dimensions of the hazard class diamonds shall be at least 250 mm x 250 mm.

12.8.5 Storage of flammable liquids of class 3, toxic substances of division 6.1 and **corrosives** of class 8.

Nitro-methane class 3, UN No. 1261, shall be separated from substances of class 6.1, and cyanides of division 6.1 shall be separated from acids of class 8. Concentrated acids and bases shall be segregated by at least 1 m. Packaged flammable liquids of class 3, toxic substances of division 6.1 and corrosives of class 8 that are of category 3 can be stored in the same area, provided that.

a) they are kept above floor level, and

b) liquid dangerous goods of one class are not stored above dangerous goods of another class.

12.8.8.3 Toxic and infectious substances (see class 6 in SANS 10228) can contaminate firefighting water in the event of a fire, therefore:

a) Toxic and infectious substances shall be separated from other flammable products and aerosols.
b) Toxic and infectious substances shall be segregated from oxidizing substances, organic peroxides, and **corrosives**.
c) Flammable toxic and infectious substances shall be separated from non-flammable toxic and infectious substances (see 12.8.8.1).

12.8.8.4 Corrosives (see class 8 in SANS 10228) that leak or spill from their packaging can cause serious damage to other packages, with potentially hazardous consequences.

Corrosives shall be segregated from toxic substances, infectious substances, aerosols, flammables, oxidizing substances, and organic peroxides.

The provisions of above apply to the storage of the following quantities of dangerous goods.

CORROSIVES (ACIDS AND BASES CLASS 8	
Category 1	> 50 Kg
Category 2	> 200 Kg
Category 3	> 1 000 Kg

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS (OEL)

SOUTH AFRICA: HCA Regs, 2021:
Aluminium - Soluble salts: TWA OEL-RL 2 mg/m.

INTERNATIONAL:

USA	metal, insoluble compounds	1
ACGIH	Metal	15 (total dust) 5 (respirable fraction)
OSHA		10 (total dust)
NIOSH	Metal	5 (respirable dust)
	pyro powder	5
	Soluble Salts	2

ADDITIONAL EXPOSURE LIMITS UNDER THE CONDITIONS OF USE

Contains no substances with biological exposure limit indices.

DNEL/DMEL AND PNEC-VALUES

Not listed.

APPROPIATE ENGINEERING CONTROLS

Use local exhaust ventilation. Eye wash facilities and emergency shower must be available when handling this product.

General Hygiene: Avoid contact with skin, eyes, and clothing. Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Use

skin cream for skin protection. Provide skin protection plan. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace.

INDIVIDUAL PROTECTION MEASURES

<table>
<tr><td>EYE PROTECTION</td><td>  </td><td>Tight fitting non-vented safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as SANS 50166:2018. Contact lenses should not be worn as they may contribute to severe eye injury. Not required if full-face respirator is used.</td></tr>
<tr><td>FACE PROTECTION</td><td>  </td><td>If the face is at risk a protective shield must also be worn tested and approved under appropriate government standards such as SANS 1400:2010.

WARNING – A face shield shall not be worn during the application of dangerous substances that emit toxic vapours or low boiling-point organic solutions.</td></tr>
<tr><td>HAND PROTECTION</td><td>  </td><td>Use protective gloves. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well-ventilated location. Pay attention to skin care. Skin protection cremes do not protect sufficiently against the substance.

Suggested material:
Rating: 1 – Not Recommended, 2 – Good, 3 – Fair, 4 – Excellent, 0 – Not Tested
<table>
<tr><th>Material Type</th><th>Rating</th><th>Breakthrough</th></tr>
<tr><td>Butyl</td><td>4</td><td>> 8 Hrs</td></tr>
<tr><td>Neoprene</td><td>4</td><td>> 8 Hrs</td></tr>
<tr><td>PVC (Polyvinylchloride)</td><td>4</td><td>> 8 Hrs</td></tr>
<tr><td>Viton</td><td>4</td><td>> 8 Hrs</td></tr>
<tr><td>Nitrile (Acrylonitrile Butadiene Rubber)</td><td>3</td><td>> 4 Hr</td></tr>
<tr><td>Natural Rubber (Latex)</td><td>1</td><td>< 1 Hr</td></tr>
<tr><td>Synthetic Fibre/Fibreglass</td><td>1</td><td>< 1 Hr</td></tr>
</table>
If used in solution, or mixed with other substances, and under conditions which differ from SANS 416:2021 or SANS 1228:2012, contact the supplier of the CE approved gloves.</td></tr>
<tr><td>BODY PROTECTION</td><td>  </td><td>Complete suit protecting against chemicals tested and approved under appropriate government standards such as SANS 54325:2019. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.</td></tr>
<tr><td>RESPIRATORY PROTECTION</td><td>  </td><td>Where risk assessment shows air-purifying respirators are appropriate use a full-face gas/vapour respirator type ABEK1P2 SANS 50141:2003 combination respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as SANS 50136:1998, SANS 50137:2011, SANS 50140:1998.

If used, full facepiece replaces the need for face shield and/or chemical goggles. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacture.</td></tr>
</table>

NOTE: The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. Recommendations above is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE (PHYSICAL STATE, COLOUR ETC):	Yellow liquid
ODOUR:	Odourless
ODOUR THRESHOLD:	No test data available
pH:	2.0 – 3.0
MELTING/FREEZING POINT:	No test data available
INITIAL BOILING POINT AND BOILING RANGE:	No test data available
FLASH POINT:	Do not flash
EVAPORATION RATE:	No test data available
FLAMMABILITY (SOLID, GAS):	Not flammable
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	Not explosive
VAPOUR PRESSURE:	No test data available
VAPOUR DENSITY:	No test data available
RELATIVE DENSITY:	1.18 – 1.22
SOLUBILITY(IES):	Miscible in water
PARTITION COEFFICIENT: N-OCTANOL/WATER:	No test data available
AUTO-IGNITION TEMPERATURE:	No test data available
DECOMPOSITION TEMPERATURE:	No test data available
VISCOSITY:	No test data available
OXIDIZING PROPERTIES:	No test data available

NOTE: The physical data presented above are typical values and should not be construed as a specification

SECTION 10 — STABILITY AND REACTIVITY

REACTIVITY	No known dangers resulting from a reactivity of the mixture have been identified.
CHEMICAL STABILTY	Stable under normal handling, storage, and transport conditions.
POSSIBILTY of HAZARDOUS REACTIONS	None known. Hazardous polymerisation will not occur under normal conditions.
CONDITIONS TO AVOID	High temperature. Poor ventilation.
INCOMPATIBLE MATERIALS	Avoid contact with the following: Strong Acids, Bases, Oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS	In case of fire, Carbon Oxides.

SECTION 11 — TOXICOLOGICAL INFORMATION

TOXICOLOGICAL (HEALTH) EFFECTS

ACUTE TOXICITY	Based on available data, the classification criteria are not met.
SKIN CORROSION/IRRITATION	Based on available data, the classification criteria are not met.
SERIOUS EYE DAMAGE/EYE IRRITATION	Causes serious eye damage.
RESPIRATORY OR SKIN SENSITIZATION	Based on available data, the classification criteria are not met.
GERM CELL MUTAGENICITY	Based on available data, the classification criteria are not met.
CARCINOGENICITY	Based on available data, the classification criteria are not met.
REPRODUCTIVE TOXICITY	Based on available data, the classification criteria are not met.
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE	Based on available data, the classification criteria are not met.
SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE	Based on available data, the classification criteria are not met.

ASPIRATION HAZARD	Based on available data, the classification criteria are not met.

LIKELY SOURCES OF EXPOSURE

INHALATION	EYES	SKIN	INGESTION
Unlikely	Likely	Likely	Rare
During unpacking and decanting	During unpacking and decanting	During unpacking and decanting	Unhygienic processes

SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS
Refer "Toxicological (health) effects" above.

DELAYED/IMMEDIATE/CHRONIC EFFECTS FROM LONG/SHORT TERM EXPOSURE
Refer "Toxicological (health) effects" above.

NUMERICAL MEASURES OF TOXICITY (SUCH AS ATE)

TEST	ROUTE	VALUE	EFFECTS
LD50	Oral & Dermal	> 2 000 mg/kg bw	Refer above section 11.1
LC50	Inhalation	> 20 mg/l/4h	Refer above section 11.1

Data based on GHS additivity formula.

INTERACTIVE EFFECTS
No additional data available.

WHERE SPECIFIC CHEMICAL DATA IS NOT AVAILABLE
No additional data available.

MIXTURES
No additional data available.

MIXTURES VS INGREDIENTS INFORMATION
No additional data available.

OTHER INFORMATION
No additional data available.

SECTION 12 — ECOLOGICAL INFORMATION

TOXICITY

TEST	SPECIES	VALUE
LC50	Fish	> 100 mg/L
LC50	Daphnia	> 100 mg/L

Data based on GHS additivity formula.

PERSISTANCE AND DEGRADEBILITY

OECD Test Guideline 301 (A-F)	
BOD_5	No additional data available.
COD	No additional data available.

BIOACCUMULATIVE POTENTIAL

PARTITION COEFFICIENT: N-OCTANOL/WATER	
LOG-K_{OW}	No additional data available.
BIOCONCENTRATION FACTOR	
BCF	No additional data available.

MOBILITY IN SOIL
No additional data available.

OTHER ADVERSE EFFECTS
No additional data available.

SECTION 13 — DISPOSAL CONSIDERATIONS
WASTE DISPOSAL RECOMMENDATION
Dispose of waste and container in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport, or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove for physico-chemical/biological treatment. **DO NOT** discharge into drains or the environment.

ECOLOGY – WASTE MATERIAL
DO NOT release to the environment. Incinerate or dispose via licenced waste manager to approved landfill.

EMPTY CONTAINER
Avoid reuse of empty container for other storage. Consider refilling or recycling. Rinse/decontaminate thoroughly before re-filling, discarding in waste or return to supplier. Puncture container prior to disposal as waste.

Packaging Type	Description	UN Code	Portion & Material	Symbol
Jerrican	Plastics Non-Removable Head	UN3H1/Y	Body & Enclosure (HDPE)	02 PE-HD
Drums	Plastics Non-Removable Head	UN1H1/Y	Body & Enclosure (HDPE)	02 PE-HD
Composite IBC	Plastic Receptacle Steel Cage	UN31HA1/Y	Body & Enclosure (HDPE) Cage (Steel)	02 PE-HD 40 FE

SECTION 14 — TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION	ADR/RID	ADN(R)	IMDG	ICAO/IATA	
UN NUMBER	3265				
PROPER SHIPPING NAME	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.				
HAZARD CLASS(ES)	8.1 				
PACKING GROUP	III				
MARINE POLLUTANT	No				
EMERGENCY RESPONSE	**ERG 2020** 153	-	**EMS GUIDE** F-A; S-B	**ERG DRILL GUIDE** 8L - Corrosive, Other Risk Low or None	
EXEMPT / QUANTITY LIMITATIONS KG	**Exempt / Factor**	**Passenger rail**	N/A	**Passenger aircraft**	**Cargo aircraft**
	200 / 5	5 Kg		5 Kg	60 Kg
P, B, L & O Provisions SANS 10231	None	N/A	N/A	N/A	
Vessel Stowage	**10A -** A				

	10B – 40
NEMA Reportable Quantity	100Kg ALUMINIUM CHLORIDE, ANHYDROUS AND SOLUTION

Special precautions for user:
Vessel Stowage
Stowage category 10(A) "A" means
Stowage category "A" means the material may be stowed "on deck" or "under deck" on a cargo vessel or on a passenger vessel.
Stowage category 10(B) "40" means
Stow "clear of living quarters".

DO NOT load with Class 1 and 7.
Keep aluminium gas cylinders apart from caustic bases.
May be loaded with Class 8B if kept at least 1 metre apart.
Can be loaded with all other classes.
Goods of different classes must be segregated by an air space of at least 100mm or by an approved segregation device or non-dangerous goods.

P, B, L and O provisions as per SANS 10231:2006
None.

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE
Not applicable.

SECTION 15 — REGULATORY INFORMATION
SA NATIONAL LEGISLATION
Hazardous Substances Act 15 of 1973 and Regulations.
Occupational Health and Safety Act 85 of 1993 and Regulations.
National Environmental Management Act 107 of 1998 and Regulations.

SA NATIONAL STANDARDS
SANS 10228: 2006: Identification and Classification of Dangerous Goods for Transport by Road and Rail.
SANS 10231: 2018: Transport of Dangerous Goods - Operational Requirements for Road Vehicles.
SANS 10234: 2019: Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
SANS 11014: 2010: Safety Data Sheets for Chemical Products.
SANS 10263-0: 2017: The Warehousing of Dangerous Goods Part 0: General Requirements
SANS 10263-5: 2015: The Warehousing of Dangerous Goods. Part 5: The Storage and Handling of Oxidizing Substances
SANS 10263-8: 2012 The Warehousing of Dangerous Goods. Part 8: The Storage and Handling of Corrosive Substances.

Chemical safety assessment
Not assessed.

SECTION 16 — OTHER INFORMATION
FULL TEXT OF H & P - STATEMENTS REFERRED TO UNDER SECTION 2

HAZARD STATEMENTS	PRECAUTIONARY STATEMENTS
H290: May be corrosive to metals. H318: Causes serious eye damage	P234: Keep only in original packaging. P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

	P310: Immediately call a doctor/first aider. P390: Absorb spillage to prevent material damage. P406: Store in a corrosion resistant/glass/HDPE container with a resistant inner liner.

LABELLING SANS 10234:2008
SIGNAL WORD: DANGER

PICTOGRAMS

PHYSICAL & HEALTH HAZARD		ENVIRONMENTAL HAZARD	TRANSPORT	
GHS05	Corrosive Substance	N/A	Class 8.1	Corrosive Acidic
				

LEGEND TO ABBREVIATIONS & ACRONYMS

ABEK: Organic gases and vapours (BP>65ºC); Inorganic gases and vapours; Sulphur dioxide and other acid gases and vapours; Ammonia and organic ammonia derivatives
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF: Bioconcentration Factor
BOD5: Biological Oxygen Demand in 5
CAS: Chemical Abstracts Service
CBI: Confidential Business Information
CEN: European Committee for Standardization
COD: Chemical Oxygen Demand
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level
EC: European Commission
EC50: Half Maximal Effective Concentration
EMS: Emergency Medical Services
ERG: Emergency Response Guidelines
EU: European Union
GHS: Globally Harmonized System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
ICSC: International Chemical Safety Cards
IMDG: International Maritime Dangerous Goods
LC50: Lethal Concentration 50 (concentration in water having 50% chance of causing death to aquatic life)
LD50: Lethal Dose 50 (median concentration of a toxicant that will kill 50% of the test animals within a designated period)
LOG-KOW: Logarithm - Octanol - Water Partition Coefficient
NIOSH: National Institute for Occupational Safety and Health (US CDC)
NTP: National Toxicology Program
OEL: Occupational Exposure Limit
OSHA: Occupational Safety and Health Administration
P, B, L & O: Packaging, Bulk Transport, Loading Operation & Transport Operation
PBT: Persistent, Bio accumulative, and Toxic
PNEC: Predicted No-Effect Concentration
PPE: Personal Protection Equipment
RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail
RTECS: Registry of Toxic Effects of Chemical Substances
SANS: South African National Standard
vPvB: Very Persistent Very Bio Accumulative
TBA To Be Allocated

KEY LITERATURE REFERENCES AND SOURCES

Source	Hyperlink
GESTIS DATABASE	CBI
ECHA – European Chemical Agency	CBI
PUBCHEM DATA	CBI
ICSC	Not Listed
CAMEO CHEMICALS	Not Listed
USCG CHRIS Code	Not Listed
RTK Hazardous Substance Fact Sheet	Not Listed

NIOSH POCKET GUIDE	Not Listed
RTECS - NIOSH"	Not Listed
USA EPA COMPTOX	Not Listed
ECOMOLE WATCHDOG	Not Listed

TRAINING ADVICE
Ensure SDS is always available and provide adequate information, instruction, and training for operators.

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23 May 2024	2	4	05 September 2022
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18 November 2018	1	1	18 November 2018
31 August 2015	0	0	Original (MSDS)

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